

MITIGATION MONITORING & REPORTING PLAN (MMRP): HOSPITAL BUILDING STABILIZATION PROJECT, ANGEL ISLAND STATE PARK, JAN. 06

MITIGATION MEASURE OR PROJECT CONDITION	TIMING	RESPONSIBLE FOR IMPLEMENTING MITIGATIONS	RESPONSIBLE FOR INSURING IMPLEMENTATION	REQUIRED FOR TASK TO BE COMPLETE (DELIVERABLE)	SIGNATURE OF RESPONSIBLE PARTY AND DATE OF COMPLETION
CONDITION AIR-1					
<ul style="list-style-type: none"> All active construction areas will be watered at least twice daily during dry, dusty conditions. 	During construction, if applicable	Contractor	State's Rep	Watering, during dry, dusting conditions	
<ul style="list-style-type: none"> All trucks hauling soil, sand, or other loose materials on public roads (both on the Island and off) will be covered or required to maintain at least two feet of freeboard. 	During construction	Contractor	State's Rep	Covering	
<ul style="list-style-type: none"> All equipment engines will be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements. 	During construction	Contractor	State's Rep	Equipment maintained	
<ul style="list-style-type: none"> Excavation and grading activities will be suspended when sustained winds exceed 25 mph, instantaneous gusts exceed 35 mph within the project area (China Cove is sheltered from strong, northwest winds), or dust from construction might obscure driver visibility on public roads. 	During construction, if applicable	Contractor	State's Rep	Suspension of activities if applicable	
<ul style="list-style-type: none"> Earth or other material that has been transported onto paved streets (on the Island and off) by trucks, construction equipment, erosion, or other project-related activity will be promptly removed. 	During construction	Contractor	State's Rep	Prompt removal of material	
AVOIDANCE MEASURE BIO-1: NESTING RAPTORS					
<ul style="list-style-type: none"> A focused survey for raptor nests will be conducted by a DPR-qualified biologist during the nesting season (February 1 to August 31) to identify active nests within 500 feet of the project area. The survey will be conducted no less than 14 days and no more than 30 days prior to the beginning of construction. 	Prior to construction; February 1 to August 31; no less than 14 days and no more than 30 days prior to the beginning of construction	DPR-qualified biologist	Construction manager	Survey completed	
<ul style="list-style-type: none"> If nesting raptors are found within 500 feet of the project area, no construction will occur within the buffer area of 500 feet from the nest during the active nesting season of February 1 to August 31, or until the young have fledged (as determined by a DPR-qualified biologist), unless otherwise negotiated with the California Department of Fish and Game. 	Prior to and during construction	Contractor, DPR-qualified biologist	Construction manager	Buffer zone observed if applicable	

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AVOIDANCE MEASURE BIO-2: SENSITIVE AND MIGRATORY BIRD SPECIES					
<ul style="list-style-type: none"> If construction-related activities are scheduled to begin during the nesting season of February 1 to August 31, a DPR-qualified biologist will conduct a survey for nesting bird species no more than 14 days prior to commencement of construction to ensure that no nesting birds will be impacted by the project. The survey area will include the project site and a 100-foot buffer zone around it. 	Prior to construction; if construction-related activities are scheduled to begin February 1 to August 31, no more than 14 days prior to commencement of construction	DPR-qualified biologist	Construction manager	Completed survey, if applicable	
<ul style="list-style-type: none"> If active nests are located, no construction will occur within 100 feet of the nests during the active nesting season of February 1 to August 31, or until the young have fledged (as determined by a DPR-qualified biologist) or as otherwise negotiated with the California Department of Fish and Game and/or the U.S. Fish and Wildlife Service on a case-by-case basis. 	Construction if February 1 to August 31	Contractor, DPR-qualified biologist	Construction manager, state's rep.	Implementation of construction restrictions, if applicable	
CULTURAL RESOURCE MITIGATION CULT-1: SIGNIFICANT AND HISTORICALLY IMPORTANT FEATURES					
<ul style="list-style-type: none"> Before preliminary and working drawings are completed, alternatives need to be explored and acted on to the extent possible to decrease the negative impacts on the building. 	Preliminary plans and working drawings	DPR-approved cultural resource specialist, Project Manager, designer	Project manager	Pursuing alternatives	
<ul style="list-style-type: none"> Since this is a National Historic Landmark, NSC, the district, and CRD's (division) historians must comment on the plans at both the preliminary and construction drawings phase of the project. In addition, they must also have input into preliminary discussions of the scope and direction of this project. 	Preliminary plans, working drawings and construction phase	NSC, district, and CRD historians; project manager, designer	Project manager	Review and approval of plans	
<ul style="list-style-type: none"> The proposed uses of the interior spaces in the hospital must be secondary to the preservation and restoration of the significant spaces and features. 	Planning phases	NSC, district, and CRD historians; project manager, designer	Project manager	Review and approval of plans	

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<ul style="list-style-type: none"> The Cultural Landscape Report outlines a general restoration approach. Features that relate to the primary Immigration Station period of significance may be replaced where appropriate, while those relating to the military POW WWII period should be left in place where appropriate, but not replaced if missing. This approach should guide any decision-making that addresses hospital features, spaces, and components. 	Planning phases	NSC, district, and CRD historians; project manager, designer	Project manager	Review and approval of plans	
CULTURAL RESOURCE MITIGATION CULT-2: INTERIOR PLASTER WITH WRITINGS AND INSCRIPTIONS					
<ul style="list-style-type: none"> If it is determined that there are additional writings existing in the building, and before preliminary and working drawings are completed, a mitigation/treatment plan must be drawn up by a qualified architectural conservator. This will include documentation/recordation of existing inscriptions in the hospital and an approach for conservation and preservation. 	Planning phases	DPR-approved cultural resource staff (plus architectural conservator), designer	Project manager	Treatment plan designed and implemented, if applicable	
<ul style="list-style-type: none"> Additional conditions must be incorporated into the construction phase of the project to address writings that are discovered during future work. 	Planning phases and construction	DPR-approved cultural resource staff	Project manager and construction manager	Implementation of additional conditions, if applicable	
CULTURAL RESOURCE MITIGATION CULT-3: ELEVATOR SHAFT					
<ul style="list-style-type: none"> The design of the new elevator must adhere to the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings (1995), Weeks and Grimmer, which recommend that this type of modification be designed in a way that minimizes impacts to the historic fabric of the resource. 	Planning phases	DPR-approved historian, designer	Project manager	Appropriate design	
<ul style="list-style-type: none"> Historic walls must be encapsulated with furred-out walls or similar method, where possible, where the elevator will be installed. Any alternative plan must be made with approval of DPR-qualified historian. 	Planning phases and construction	DPR-approved historian, designer	Project manager	Appropriate design	
<ul style="list-style-type: none"> Historic fabric must not be removed unless absolutely necessary in order to install the elevator. All work must be done carefully and neatly so that the elevator can easily be removed (reversed) in the event that the building's use changes over the long-term. 	During construction	DPR-approved historian, contractor	State's rep.	Careful removal	
<ul style="list-style-type: none"> The unique door to rm. 212 must be preserved in place or, upon approval by a State Historian, carefully preserved and used as an interpretive artifact to illustrate the WW II use of the Hospital Bldg. 	Planning phases and construction	DPR-approved historian, contractor	State's rep.	Preservation of door	

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<ul style="list-style-type: none"> Existing conditions of the space where the elevator is to be installed must be thoroughly photo-documented before, during, and after construction and photos added to historical records (archives) for the park. 	Planning phases, construction, post-construction	DPR-approved historian, contractor	State's rep.	Documentation	
<ul style="list-style-type: none"> The location of the elevator must be approved by a DPR-approved cultural resource specialist. Elevator construction and related demolition must be monitored by a DPR-approved cultural resource specialist. 	Planning phases and construction	DPR-approved historian, designer, contractor	State's rep., project manager	Approval of location	
<ul style="list-style-type: none"> The proposed removal of any historic fabric during the installation of the new elevator must be reviewed and approved by a DPR-approved cultural resource specialist, during the Preliminary Plan and Working Drawing Phases, subject to cultural resource specialist inspection during the Construction Phase. 	Planning phases and construction	DPR-approved historian, designer, contractor	State's rep., project manager	Fabric removal plan	
CULTURAL RESOURCE MITIGATION CULT-4: SEISMIC STRENGTHENING AND WOOD REPAIR					
<ul style="list-style-type: none"> If exterior wooden siding is removed in order to install wood shear panels, removal must be carried out with extreme care so that original siding is not damaged and may be placed back on the building. If wood siding splits and cracks upon removal, work must stop and removal methods must be re-evaluated and approved by a DPR-qualified state historian. 	During construction	Contractor	State's rep.	Careful removal, reevaluation and review of siding, if applicable	
Siding must be numbered and replaced in its original location.	During construction	Contractor	State's rep.	Numbering and proper reinstallation of siding.	
<ul style="list-style-type: none"> Wholesale removal of interior plaster finishes, especially character-defining coved ceilings, in order to install plywood shear panels (Architectural Resources Group, 2002: Appendix G, 4 & SK 6), must be avoided. A DPR-qualified historian must review and approve plaster removal plan. 	Planning phases and construction	DPR-qualified historian	Project manager, construction manager	Review and approval of plaster removal plan.	
CULTURAL RESOURCE MITIGATION CULT-5: EXTERIOR CONCRETE ELEMENTS					
<ul style="list-style-type: none"> All concrete repairs and replacements must be in-kind to match adjacent materials and design, including the use of river sand in replacement concrete mix if necessary to match historic concrete color. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Design indicates concrete replacement in-kind; in-kind concrete installed	

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<ul style="list-style-type: none"> Any new feature must be compatible with, but not exactly copy, the historic stairs, paths, and walls. Use of a modern, whiter concrete mix is one possibility. Ramps will be designed and located so that it may not be necessary to permanently remove historic exterior ancillary concrete elements. Any proposed removal of historic elements must be approved by a DPR-qualified historian. 	Planning phases and construction	Designer, contractor, DPR-qualified historian	Project manager, State's rep.	Appropriate design; DPR-historian review of proposed historic elements to be removed	
CULTURAL RESOURCE CONDITION CULT-1: SUN PORCHES, HISTORIC FENCING, AND RECREATION YARD					
<ul style="list-style-type: none"> All work must match historic architectural drawings and photographs. 	Planning phases and construction	Designer, DPR-qualified historian	Project manager	Appropriate design and construction	
CULTURAL RESOURCE CONDITION CULT-2: INTERIOR FINISHES AND LIGHTING					
<ul style="list-style-type: none"> Replace only those sections of wood trim, doors, and staircase elements that are deteriorated beyond repair. Replace in-kind. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Appropriate design and construction	
<ul style="list-style-type: none"> Retain original lath in place wherever possible. Do not substitute modern gypsum wallboard for plastering. Repair before replacing and replace in-kind. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Appropriate design and construction	
<ul style="list-style-type: none"> Surviving lighting fixtures must be restored if at all possible, and placed back in service. Exact replacements may be considered for missing fixtures if they are marked and recorded as replacements. If not exact replacements, new fixtures, including additional fixtures to supplement historic lighting where required to meet code, must be compatible with surviving fixtures and with the look and feel of the historic spaces within the building, or be completely unobtrusive. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Appropriate design and construction	
CULTURAL RESOURCE CONDITION CULT-3: ABATE HAZARDOUS MATERIALS					
<ul style="list-style-type: none"> Stabilize and conserve historic magnesite flooring and 3' resilient flooring. If this treatment is not possible, the flooring must be replaced with a safe, non-asbestos-containing material that replicates the look and feel of the original magnesite and the 3' strip resilient sheet flooring. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Appropriate design and construction	

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CULTURAL RESOURCE CONDITION CULT-4: MECHANICAL, COMMUNICATION, ELECTRICAL, AND FIRE PROTECTION SYSTEMS AND BUILDING CODE UPGRADES					
<ul style="list-style-type: none"> All components of the original electrical system, especially any original electrical panels and push-button electrical switches, must be abandoned in place in order to fully comply with the Secretary of the Interior's Standards. If original switches must be replaced, install reproduction push-button switches as replacements. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Appropriate design and construction	
<ul style="list-style-type: none"> The fire protection system must be hidden from view as much as possible. Sprinkler heads must be recessed in the ceilings of the building. "Drop-down" piping must be avoided or approved by a DPR-qualified historian. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Appropriate design and construction	
<ul style="list-style-type: none"> Care must be exercised when cutting holes through walls for piping, air registers, and electrical components so that adjacent historic fabric is not damaged. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Appropriate design and construction	
<ul style="list-style-type: none"> The original radiators shall be retained in place. If possible, after study of their potential use, they may be restored to functional status. If not, any alternative HVAC system shall be reviewed and approved by an approved DPR qualified historian. 	Planning phases and construction	Designer, contractor	Project manager, State's rep.	Appropriate design and construction	
<ul style="list-style-type: none"> A DPR-qualified historian must review plans for fire sprinkler pipe, plumbing, and electrical runs. Penetration of walls, floors, and ceilings must be made in order to install these systems and the contractor must review for approval proposed penetrations with the qualified DPR historian. 	Planning phases and construction	Designer, contractor, DPR-qualified historian	Project manager, State's rep.	Appropriate design and construction	
CULTURAL RESOURCE CONDITION CULT-5: RESTORATION OF ORIGINAL BATHROOMS					
<ul style="list-style-type: none"> A focused plan for the distribution and location of restroom facilities in the building must be generated during the Preliminary Plan process, realizing that it is the intent to keep in place as much of the historic restrooms as possible, while conforming with current ADA accessibility laws. If it is determined that the HSR's recommendation & rehabilitation plan does not respect or utilize the historic locations; an alternative plan may retain, to the extent possible, historic spaces & fixtures, thereby reducing the automatic removal of original function and furnishings. A DPR-qualified historian must participate in the planning process in order to ensure that restrooms reflect their original design. 	Planning phases and construction	Designer, DPR-qualified historian	Project manager	Appropriate design	

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<ul style="list-style-type: none"> Where possible this project shall retain the original design of Toilet Room 113 and restore it to reflect its original use as a large restroom for the Hospital Building. A DPR-qualified historian must participate in the planning process and approve any deviation from this condition. 	Planning phases and construction	Designer, DPR-qualified historian	Project manager	Appropriate design	
<ul style="list-style-type: none"> In order to retain the original spatial relationships of the interior of the Hospital Building, new restroom facilities must be constructed within spaces that were originally restrooms wherever possible. 	Planning phases and construction	Designer	Project manager	Appropriate design	
<ul style="list-style-type: none"> Consideration must be made for period-correct or at least compatible plumbing fixtures in selected restrooms to be approved by a DPR-qualified historian. 	Planning phases and construction	Designer, DPR-qualified historian	Project manager	Appropriate design	
<ul style="list-style-type: none"> A DPR-qualified historian must approve any modifications to bathroom spaces that will change their original use. 	Planning phases and construction	Designer, DPR-qualified historian	Project manager	Appropriate design, DPR-qualified historian review	
CULTURAL RESOURCE CONDITION CULT-6: THRESHOLDS AND DOOR OPENINGS					
<ul style="list-style-type: none"> If, after applying the State Historic Building Code, door openings still need widening, the first course of action must be to attempt to accomplish this by removing the door and stops only. If additional modification is still necessary, then the vertical door trim must be used on the widened opening and a longer "head" trim must be milled to match existing. If original door is removed, it must be carefully stored. All work must be thoroughly photo-documented before, during, and after construction and photos added to historical records (archives) for the park. 	Planning phases and construction	Designer, DPR-qualified historian, contractor	Project manager, State's rep.	Appropriate design and construction, photodocumentation if applicable	
<ul style="list-style-type: none"> Any modifications made to doors so that they meet ADA standards must be approved by a DPR-qualified historian. 	Planning phases and construction	Designer, DPR-qualified historian	Project manager	DPR-qualified historian review	

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CULTURAL RESOURCE CONDITION CULT-7: ARCHAEOLOGICAL RESOURCES					
<ul style="list-style-type: none"> The preliminary plans shall be reviewed by a DPR qualified archeologist to determine the potential impact of subsurface work on midden and other historically significant sites and remnants. If it is determined that there is the potential for impact, a preliminary investigation plan shall be prepared and carried out to determine what impacts may occur. Any findings shall be considered in the preparation for a plan to monitor construction activity. 	Prior to construction	Designer, DPR-qualified archaeologist	Project manager	Plan review by DPR-qualified archaeologist; investigation if applicable	
<ul style="list-style-type: none"> California DPR, Northern Service Center archaeological staff will be notified a minimum of five days in advance of all ground-disrupting work on order to review and determine the course of appropriate cultural resource management work. All ground-disrupting activities determined substantial enough in size and scope will be monitored by a DPR-qualified archaeologist. The DPR-qualified archaeologist will identify archaeological data exposed by ground-disrupting work that are contributing elements to the NRHP status of the U.S. Immigration Station as well as other remains related to the later military and earlier prehistoric periods that may be significant enough in themselves to qualify for NRHP listing. In the event that previously undocumented cultural resources are encountered during project construction (including but not limited to dark soil containing shellfish, bone, flaked stone, groundstone, or deposits of historic trash), work within the immediate vicinity of the find will be temporarily halted or diverted until a DPR-qualified cultural resource specialist has evaluated the find and implemented appropriate treatment and disposition of the artifact(s). All monitoring work must be designed and implemented by a California DPR-qualified archaeologist. 	During construction	Contractor, construction manager, DPR-qualified archaeologist	State's rep.	Notification, monitoring	

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CULTURAL RESOURCE CONDITION CULT-8: HUMAN REMAINS					
<ul style="list-style-type: none"> In the event that human remains are discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate DPR personnel. Any human remains and/or funerary objects would be left in place or returned to the point of discovery and covered with soil. The DPR Sector Superintendent (or authorized State representative) would notify the County Coroner, in accordance with §7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative). If a Native American monitor is on-site at the time of the discovery, the monitor would be responsible for notifying the appropriate Native American authorities. 	During construction	Contractor, construction manager, DPR Sector Superintendent, Native American monitor	State's rep.	Notification, work diversion if applicable	
If the coroner or tribal representative determines the remains represent Native American interment, the NAHC in Sacramento and/or tribe would be consulted to identify the most likely descendants and appropriate disposition of the remains. Work would not resume in the area of the find until proper disposition is complete (PRC §5097.98). No human remains or funerary objects would be cleaned, photographed, analyzed, or removed from the site prior to determination except at the direction of the coroner.	During construction, if applicable	DPR-qualified archaeologist, Native American monitor, construction manager	State's rep.	Consultation, if applicable	
If it is determined the find indicates a sacred or religious site, the site would be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representatives would also occur as necessary to define additional site mitigation or future restrictions.	During construction, if applicable	DPR-qualified archaeologist, Native American monitor, construction manager, contractor	State's rep.	Avoidance and consultation, if applicable	
MITIGATION MEASURE GEO-1: SEISMIC IMPROVEMENTS					
<ul style="list-style-type: none"> Because of the planned new public use of this building, seismic retrofitting is necessary to provide adequate public and worker safety. A condition assessment to finalize the scope of specific work, room-by-room and structural element-by-structural element will be conducted to protect the buildings from significant damage from an earthquake, and to reduce this hazard to less than significant. 	Planning phases	Designer	Project manager	Condition assessment, seismic retrofitting	

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<ul style="list-style-type: none"> A previous investigation of the slope stability and integrity of the retaining wall system was completed by Architectural Resources Group's geotechnical consultant. All recommendations from the consultant determined to be within the scope of this project for repairs to the retaining walls or stabilization of the slopes will be implemented to mitigate against slope failures from seismic or other causes. 	Planning phases and construction	Designer	Project manager	Implementation of recommendations	
CONDITION GEO-1: EROSION CONTROL BMPs					
<ul style="list-style-type: none"> In order to protect against soil erosion and soil loss, the use of Best Management Practices (BMPs) will be implemented for this project. BMPs must include, but need not be limited to, the following procedures: If construction activities extend into the rainy season or if an unseasonal storm is anticipated, then proper winterizing procedures shall be employed. Acceptable winterizing BMPs include covering stockpiled soil with tarps, constructing silt fences, straw bale barriers, fiber rolls, or other structures around stockpiled soil and around graded areas. 	During construction	Designer, contractor	Project Manager, State's Rep	Implementation of BMPs	
<ul style="list-style-type: none"> During the construction process, loss of soil shall be minimized by surrounding the work site with silt fences, straw bales, fiber rolls, or other erosion control devices. Graded areas and areas of fill must be compacted as soon as feasible to minimize erosion. Temporary revegetation or geotextiles, fiber mats, or other techniques may be employed to reduce soil loss. If water is added to the soils during compaction or other construction work, the amount must be limited to prevent water and soil runoff. Post-construction revegetation and other long-term soil erosion controls procedures must be included as part of the project plan. 	During construction, post-construction, planning phases	Contractor, designer	State's Rep, Project Manager	Erosion prevention during construction, revegetation	
<ul style="list-style-type: none"> Acceptable BMPs are available in the California Stormwater Quality Association's <i>Stormwater Best Management Practices Handbook - Construction</i>, available on the web at: www.cabmphandbooks.com. 	During construction	Contractor, designer	State's Rep, Project Manager	Implementation of BMPs	
CONDITION GEO-3: WASTEWATER TREATMENT					
<ul style="list-style-type: none"> The project plans must show that the existing available sewage treatment system can accommodate the input from the rehabilitated Hospital Building and any other potential sources of wastewater. 	Planning phases	Designer	Project manager	Project plan demonstration	

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CONDITION HAZMAT-1					
<ul style="list-style-type: none"> A Spill Prevention Plan will be in place during the project construction to provide protection to on-site workers, the public, and the environment from accidental leaks or spills of vehicle fluids or other potential contaminants. Applicable Best Management Practices (BMPs) for spill prevention and cleanup and handling of hazardous materials can be found in the California Stormwater Quality Association Stormwater Best Management Practice Handbook for Construction, available on the web at www.cabmphandbooks.com. Some, but not all, of the applicable BMPs with referenced numbers are described below: 	Planning phases and construction	Contractor, designer	State's Rep, Project Manager	Spill Prevention Plan; implementation of BMPs	
<ul style="list-style-type: none"> All equipment will be inspected for leaks immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from Park premises (BMP NS-10). 	During construction	Contractor	State's Rep	Inspection of equipment	
<ul style="list-style-type: none"> The contractor(s) will prepare an emergency spill response plan (see BMP WM-4) prior to the start of construction and maintain a spill kit on-site throughout the duration of the project. This plan would include a map that delineates construction staging or storage areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical in any physical form on or immediately adjacent to Angel Island SP during construction, the contractor would immediately notify the appropriate DPR staff (e.g., project manager or supervisor). 	Prior to and during construction	Contractor	State's Rep	Preparation of emergency spill response plan and maintenance of an on-site spill kit. Notification if applicable.	
<ul style="list-style-type: none"> Equipment will be cleaned, repaired (other than emergency repairs), and fueled outside park boundaries, whenever possible. Contaminated water, sludge, spill residue, or other hazardous compounds will be disposed of outside park boundaries at a lawfully authorized destination (see BMPs NS-8 to -10). 	During construction	Contractor	State's Rep	Cleaning, repairing, refueling, disposal outside of park boundaries at a lawfully authorized location.	
<ul style="list-style-type: none"> Procedures for the proper storage, use, and disposal of any solvents or other chemicals used in the restoration process will be established as part of the Spill Prevention Plan (see BMPs WM-1 and WM-2). This may include the use of respirators, dust masks, protective clothing, air monitoring, or other procedures to reduce or eliminate exposure to workers, the public, or the environment. Material Safety Data Sheets for all chemicals will be available at the job site. 	Planning phases and construction	Contractor	State's Rep	Use of proper procedures as outlined in Spill Prevention Plan; MSDS on-site	

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<ul style="list-style-type: none"> The Health and Safety Plan/Spill Prevention Plan and the project scope must contain procedures for storage, transport, and disposal of any nonhazardous or hazardous waste generated as part of the restoration process (both materials removed from the buildings and any chemicals used in the process). Refer to BMPs WM-5 and WM-6 in the Stormwater BMP Manual. 	Planning phases and construction	Contractor	State's Rep	Proper design and implementation of Spill Prevention Plan	
<ul style="list-style-type: none"> Building demolition or rehabilitation activities that will disturb friable asbestos-containing material (ACM) or render nonfriable ACM friable must be preceded by removal and disposal of affected ACM only by qualified personnel in compliance with all state, federal, and local regulations (8 CCR 1529, CHSC 25915-25919.7, and Bay Area Air Quality Management District Regulation 11, Rule 2). Disturbance, handling, and disposal of lead containing paints or other materials must be done in accordance with applicable state, federal, and local regulations (8 CCR 1532.1 and 17 CCR 35001-36100) (Harding ESE, 2001). 	During construction	Contractor	State's Rep	Lawful handling and disposal of hazardous materials.	
<ul style="list-style-type: none"> Rodent excrement has been linked to arenaviruses and Hantavirus illnesses. Bird droppings have been linked to histoplasmosis and diseases associated with the pathogens <i>Cryptococcus neoformans</i> and <i>Chlamydia psittaci</i>. Employees performing cleanup should be advised of the hazards and use appropriate personal protective equipment and safe work practices to prevent exposure to pathogens (Harding ESE, 2001). 	During construction	Contractor	State's Rep	Notification, training, and provision of appropriate personal protective equipment.	
CONDITION HAZMAT-2					
<ul style="list-style-type: none"> A Health and Safety Plan will be developed and reviewed by all project staff prior to the start of any work. Job site characteristics to reduce the potential for fire would be included such as, but not limited to, those discussed below: 	Planning phases	Contractor	State's Rep	Development and review of Health and Safety Plan.	
<ul style="list-style-type: none"> Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers would be required for all heavy equipment. 	During construction	Contractor	State's Rep	Spark arrestors or turbo-charging and fire extinguishers for all heavy equipment.	
<ul style="list-style-type: none"> Construction crews would be required to park vehicles away from flammable material, such as dry grass and brush. At the end of each workday, heavy equipment would be parked over mineral soil, asphalt, or concrete to reduce the chance of fire. 	During construction	Contractor	State's Rep	Appropriate parking.	

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<ul style="list-style-type: none"> The Health and Safety Plan will provide guidelines for the proper use, storage, and disposal of any flammable materials used inside and outside the buildings during the restoration work. 	During construction	Contractor	State's Rep	Development and implementation of these measures into Health and Safety Plan.	
<ul style="list-style-type: none"> Park staff would be required to have a State Park radio on site, which allows direct contact to firefighting staff on the Island. Fire suppression equipment will be available on park grounds and fire hydrants are located near the Immigration Station. Prior to commencement of work, the fire hydrants will be tested to ascertain which ones are functional. 	Prior to and during construction	Park staff	Construction manager	Radio on-site, testing of fire hydrants.	
CONDITION HYDRO-1					
<ul style="list-style-type: none"> Use appropriate BMPs (see Geology section, Condition Geo-1) to control or prevent soil erosion and siltation from areas of ground disturbance generated as part of this project. 	During construction	Contractor, designer	State's Rep, Project Manager	Implementation of BMPs	
<ul style="list-style-type: none"> Prepare and implement a Spill Prevention Plan (see Hazards section) to protect against any spills of vehicle fluids or other potential contaminants used or generated as part of this project. 	Planning phases	Contractor	Project Manager	Preparation and implementation of Spill Prevention Plan	
NOISE CONDITION-1					
<ul style="list-style-type: none"> Construction activities will generally be limited to the hours between 7 a.m. and 6 p.m., daily and on holidays. (Day use visitors do not have access to the Island until 10 a.m.) 	During construction	Contractor	State's Rep	Limited hours	
<ul style="list-style-type: none"> Internal combustion engines used for any purpose at the job site will be equipped with a muffler of a type recommended by the manufacturer. Equipment and trucks used for construction will utilize the best available noise control techniques (e.g., engine enclosures, acoustically attenuating shields or shrouds, intake silencers, ducts, etc.) whenever feasible and necessary. 	During construction	Contractor	State's Rep	Noise control on vehicles/engines.	
<ul style="list-style-type: none"> Stationary noise sources and staging areas will be located as far from visitors as possible. If they must be located near visitors, stationary noise sources will be muffled to the extent feasible and/or, where practicable, enclosed within temporary sheds. 	During construction	Contractor	State's Rep	Proper location and muffling of noise sources.	